IN THE CLAIMS

Please amend the claims as follows:

Claims 1-3 (Canceled).

Claim 4 (New): An optical device wherein a direction of beam propagation is selected to be other than those of the (111)-axis direction of a crystal belonging to equi-axis crystal system to reduce birefringence effects based on photoelastic effects due to centrosymmetrically induced stress.

Claim 5 (New): The optical device according to Claim 4, wherein the direction of beam propagation is selected to (100)-direction of crystal.

Claim 6 (New): The optical device according to Claim 4, wherein the direction of beam propagation is selected to (110)-direction of crystal.

Claim 7 (New): The optical device according to Claim 4, wherein the crystal in equi-axis crystal system is YAG, GGG, GaN, or GaAs.

Claim 8 (New): The optical device according to Claim 4, wherein a linearly polarized beam forming an angle of 45°±5° with respect to the crystal axis in a (100)-plane is used to reduce depolarization when a radius of a laser beam (r_a) = a rod radius (r_0).

Claim 9 (New): The optical device according to Claim 4, wherein a (110)-cut rod is used to reduce depolarization when $r_a < r_0$, in which r_a is a radius or a laser beam and r_0 is a rod radius.

Claim 10 (New): The optical device according to Claim 4, wherein a (110)-cut rod is used and a beam size is controlled in a case of a uniform pumping to reduce depolarization when $r_a = r_0/4$, in which r_a is a radius or a laser beam and r_0 is a rod radius.

Claim 11 (New): The optical device according to Claim 4, wherein a (110)-cut rod and a pump beam which plays a role as a gain aperture are used in a case of end pumping to reduce depolarization when $r_a = r_0/4$, in which r_a is a radius or a laser beam and r_0 is a rod radius.

Claim 12 (New): The optical device according to Claim 4, wherein a composite material in which doped YAG is surrounded by undoped YAC is used in a case of end pumping and side pumping.